

1.00024632 10513602

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Steve S. HE *et al.*

Appl. No.: 10/024,632

Filed: December 19, 2001

For: *Nucleic Acid Molecules Associated
with Plant Cell Proliferation and
Growth and Uses Thereof*

Art Unit: To be assigned

Examiner: To be assigned

Atty. Docket: 16517.001/38-21(51837)B

Preliminary Amendment and Response to Notice to File Missing Parts

Box Missing Parts

Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the Notice to File Missing Parts mailed March 5, 2002 ("Notice"), Applicants submit the following remarks.

AMENDMENTS

In the Specification:

Please amend the specification as follows:

At page 7, lines 17-18, please cancel the reference to Figure 3.

Please delete the text of the specification beginning at page 7, line 19 through page 8, line 1, and replace it with the following:

Figure 3 shows a plasmid map for plant transformation vector pMON57913.

Figure 4 shows a plasmid map for plant transformation vector pMON57914.

Figure 5 shows a plasmid map for plant transformation vector pMON57955.

Figure 6 shows a plasmid map for plant transformation vector pMON57925.
Figure 7 shows a plasmid map for plant transformation vector pMON57926.
Figure 8 shows a plasmid map for plant transformation vector pMON57927.
Figure 9 shows a plasmid map for plant transformation vector pMON57928.
Figure 10 shows a plasmid map for plant transformation vector pMON57929.
Figure 11 shows a plasmid map for plant transformation vector pMON57930.
Figure 12 shows a plasmid map for plant transformation vector pMON57931.
Figure 13 shows a plasmid map for plant transformation vector pMON57932.
Figure 14 shows a plasmid map for plant transformation vector pMON57933.
Figure 15 shows a plasmid map for plant transformation vector pMON57934.
Figure 16 shows a plasmid map for plant transformation vector pMON57988.
Figure 17 shows a plasmid map for plant transformation vector pMON57991.
Figure 18 shows a plasmid map for plant transformation vector pMON71250.

Please delete the paragraph on page 53, lines 24-32, and replace it with the following paragraph:

The relative relatedness (phylogenic tree) of GhANT1, *ANT*, GmANT1, GmANT2, OsANT1 and ZmANT1 is examined. The multiple alignment was first performed according to the procedure described for Figure 2 and then the phylogenic tree was constructed using the software PHYLIP (Phylogeny Inference Package) version 3.5c provided as: "Felsenstein, J. 1993. PHYLIP version 3.5c. Distributed by the author. Department of Genetics, University of Washington, Seattle." Subroutines and parameters used were: "seqboot" (parameter: -D 'Molecular sequences' -R 100 -J 'Bootstrap'), "protdist" (parameter: -P 'PAM', -M 'Yes 100'), "kitch" (parameter: -U 'Yes', -P 2.00000, -L 'No' -R 'No' -S 'No' -J 'No' -M 'Yes, 100' - 'No'), and "consense" (parameter: -R 'Yes').

Please delete the paragraph on page 54, lines 1-4, and replace it with the following paragraph:

Genome-wide search suggests that *Arabidopsis* has only one *ANT* gene (g1244708), while unexpectedly rice apparently has two *ANT*-like genes (OsANT1 and OsANT2). The *ANT*-like genes appear diverged between monocots and dicots and that the cotton GhANT1 may not be the closest *ANT*-like gene from that species.

In the Drawings:

Please replace original figures 4 through 19 with renumbered drawings 3 through 18, filed herewith. In accordance with 37 C.F.R. § 1.121(d), the changes to the drawings have been submitted on a separate paper showing the proposed changes in red ink.

REMARKS

The Notice identifies that Figure 3 has inadvertently been omitted from the application as filed. The Notice requires Applicants to either (1) prove deposit of the drawing in the U. S. Patent and Trademark Office, (2) submit the drawing and accept the date upon which the drawing was submitted as the filing date of the application, or (3) accept the application as deposited in the USPTO without the drawing.

Applicants respectfully point out that although the Office of Initial Examining Procedure ("Office") presumes that a drawing is necessary under the first sentence of 35 U.S.C. § 113 "in all applications where the drawing is referred to in the specification and one or more figures have been omitted", an application is not incomplete if, in fact, the drawing is not required. MPEP § 608.02, page 600-86. Applicants also respectfully point out that "[a] drawing is not required for a filing date under 35 U.S.C. 111 and 113 if the application contains:

(A) at least one process claim including the term "process" or "method" in its introductory phrase"

Id. Applicants respectfully direct the Office's attention to claims 19, 20, 22, 24, and 29-34, which are method and process claims in the originally filed application.

Applicants submit that although Figure 3 was referenced in the above-filed application, the disclosure of Figure 3 is not "necessary for the understanding of the subject matter sought to be patented" 35 U.S.C. § 113. Rather, original Figure 3 merely illustrates the information presented in Table 1 and Table 2 of the specification. *See* Specification at page 8, line 26 through page 10, line 4. Applicants reserve the right to supply original Figure 3 should the Examiner request its submission during prosecution of the patent application, because Applicants believe the subject matter admits of illustration. Nonetheless, in order to facilitate prosecution, Applicants have amended the specification to delete all references to original Figure 3 and have submitted new copies of the drawings with consecutive numbering. No new matter enters by these amendments.

Applicants do not believe that any fees are due at this time; however, should any fees be required for any reason relating to this document, the Commissioner is authorized to deduct the fees from Deposit Account No. 13-4125, referencing docket number 38-21(51837)B.

Respectfully submitted,

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by J. E. Cohan

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by June E. Cohan (Reg. No. 43,741)

Date: 6 May 2002

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314-694-1671 facsimile

Marked-up Version Showing Changes to be Made

In the specification at page 7, line 19 through page 8, line 1:

Figure [4]3 shows a plasmid map for plant transformation vector pMON57913.

Figure [5]4 shows a plasmid map for plant transformation vector pMON57914.

Figure [6]5 shows a plasmid map for plant transformation vector pMON57955.

Figure [7]6 shows a plasmid map for plant transformation vector pMON57925.

Figure [8]7 shows a plasmid map for plant transformation vector pMON57926.

Figure [9]8 shows a plasmid map for plant transformation vector pMON57927.

Figure [10]9 shows a plasmid map for plant transformation vector pMON57928.

Figure [11]10 shows a plasmid map for plant transformation vector pMON57929.

Figure [12]11 shows a plasmid map for plant transformation vector pMON57930.

Figure [13]12 shows a plasmid map for plant transformation vector pMON57931.

Figure [14]13 shows a plasmid map for plant transformation vector pMON57932.

Figure [15]14 shows a plasmid map for plant transformation vector pMON57933.

Figure [16]15 shows a plasmid map for plant transformation vector pMON57934.

Figure [17]16 shows a plasmid map for plant transformation vector pMON57988.

Figure [18]17 shows a plasmid map for plant transformation vector pMON57991.

Figure [19]18 shows a plasmid map for plant transformation vector pMON71250.

In the specification at page 53, lines 24-32:

The relative relatedness (phylogenic tree) of GhANT1, *ANT*, GmANT1, GmANT2, OsANT1 and ZmANT1 is [shown in Figure 3 (for SEQ ID's, see figure)] examined. The multiple alignment was first performed according to the procedure described for Figure 2 and then the phylogenic tree was constructed using the software PHYLIP (Phylogeny Inference Package) version 3.5c provided as: "Felsenstein, J. 1993. PHYLIP version 3.5c. Distributed by the author. Department of Genetics, University of

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In the specification at page 54, lines 1-4:

Genome-wide search suggests that *Arabidopsis* has only one *ANT* gene (g1244708), while unexpectedly rice apparently has two *ANT*-like genes (OsANT1 and OsANT2). [Figure 3 show that the] The *ANT*-like genes appear diverged between monocots and dicots and that the cotton GhANT1 may not be the closest *ANT*-like gene from that species.

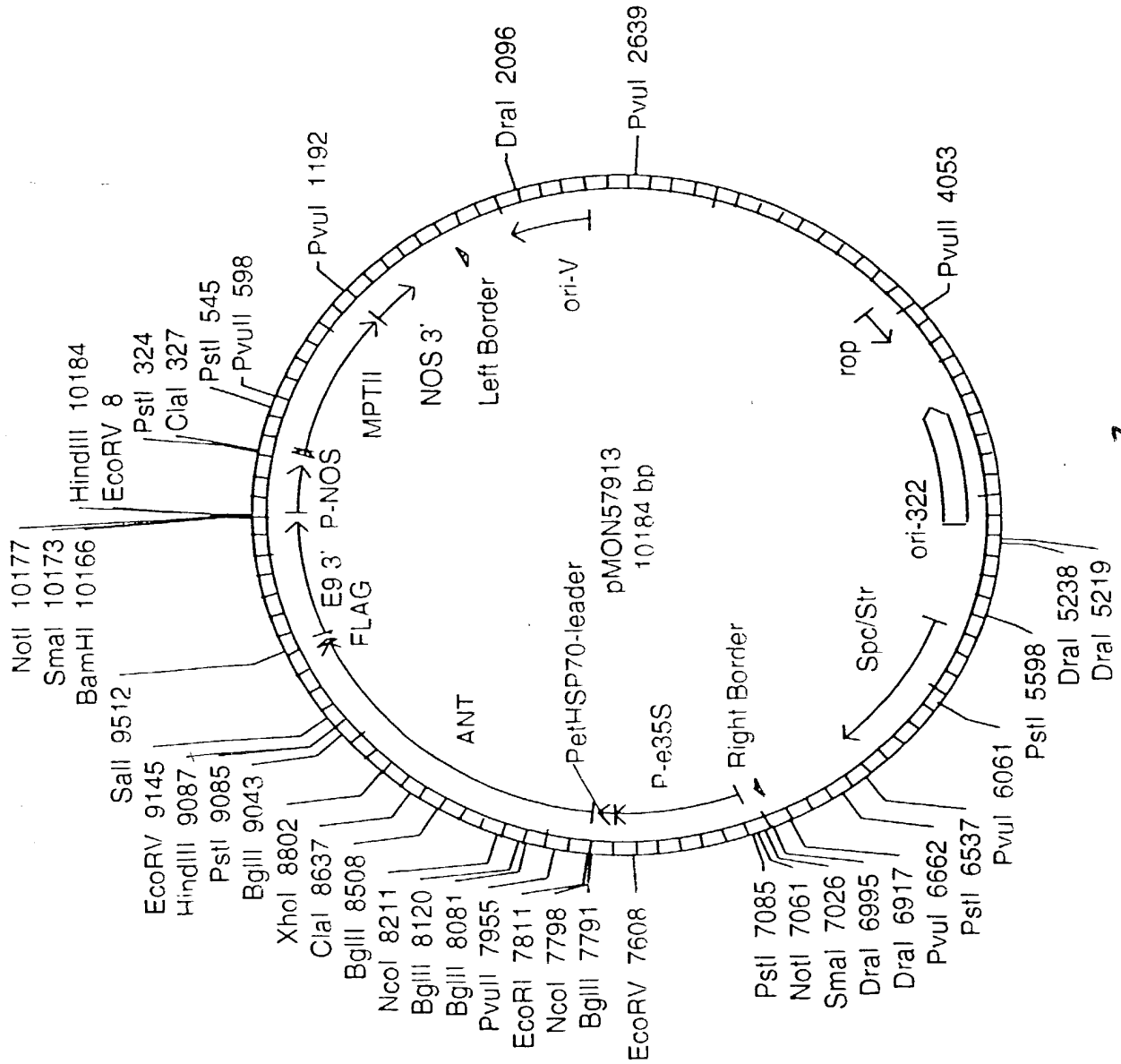
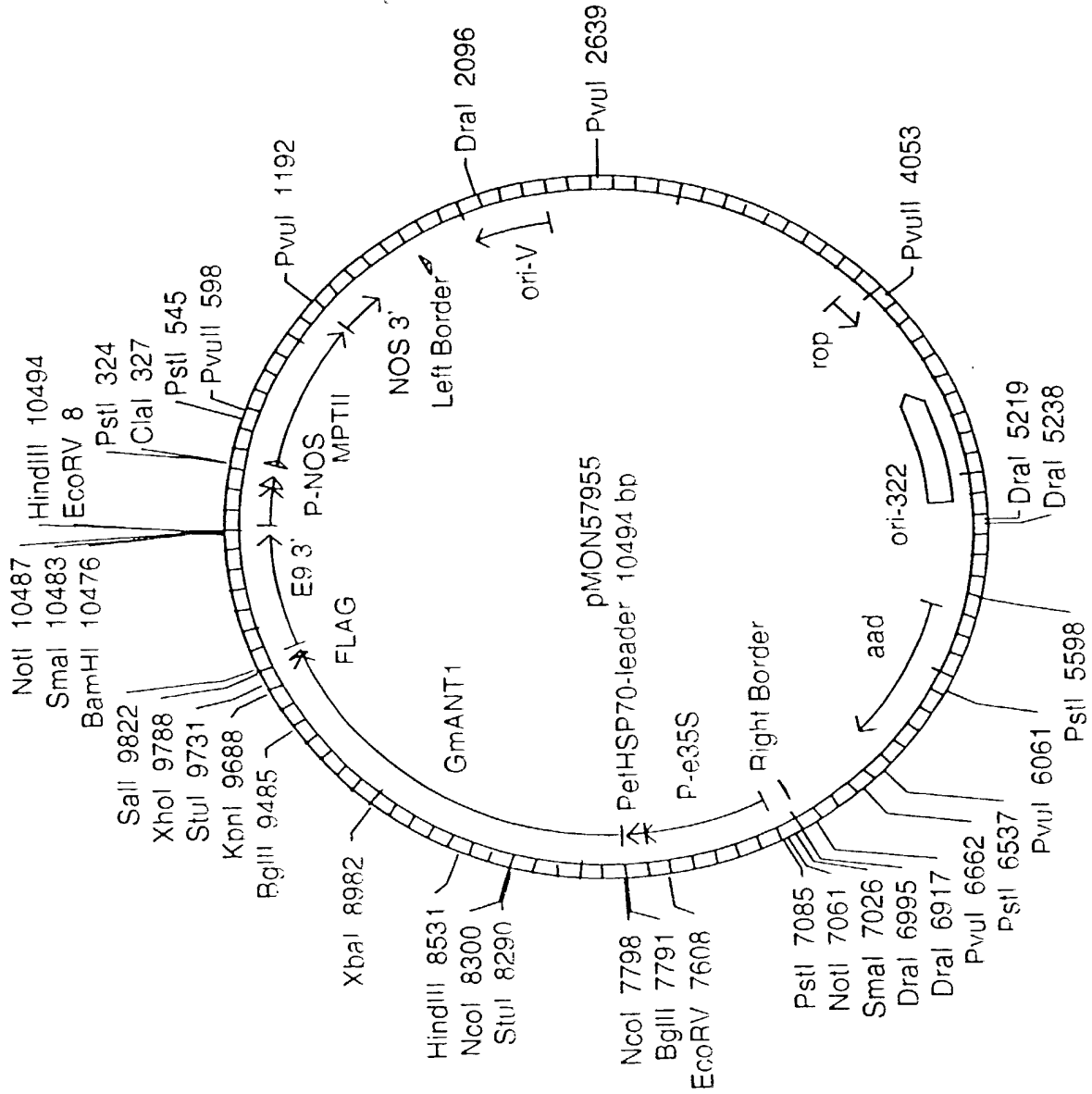


Figure 3

Figure 4

Figure 5



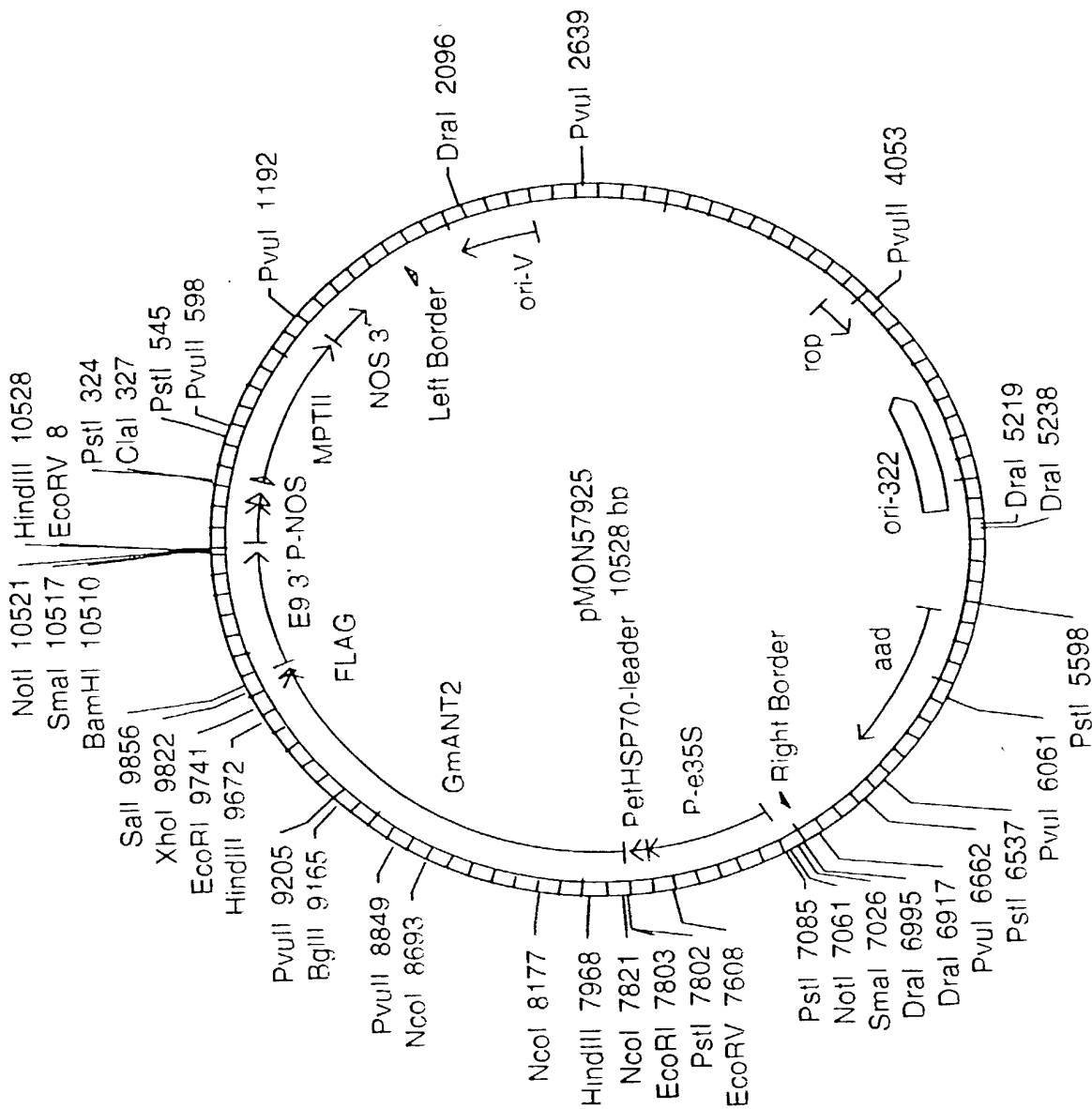


Figure 6

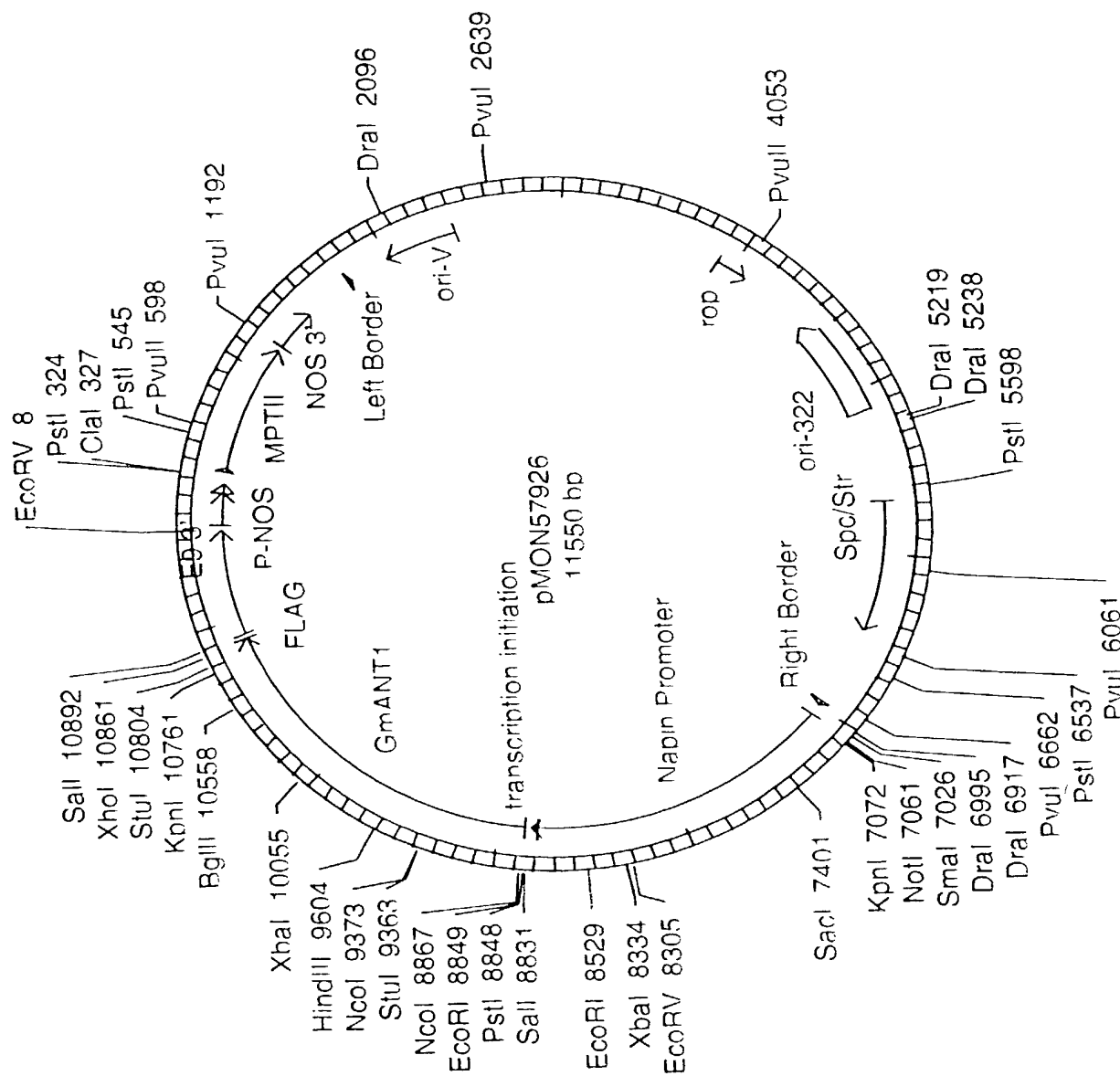


Figure 7

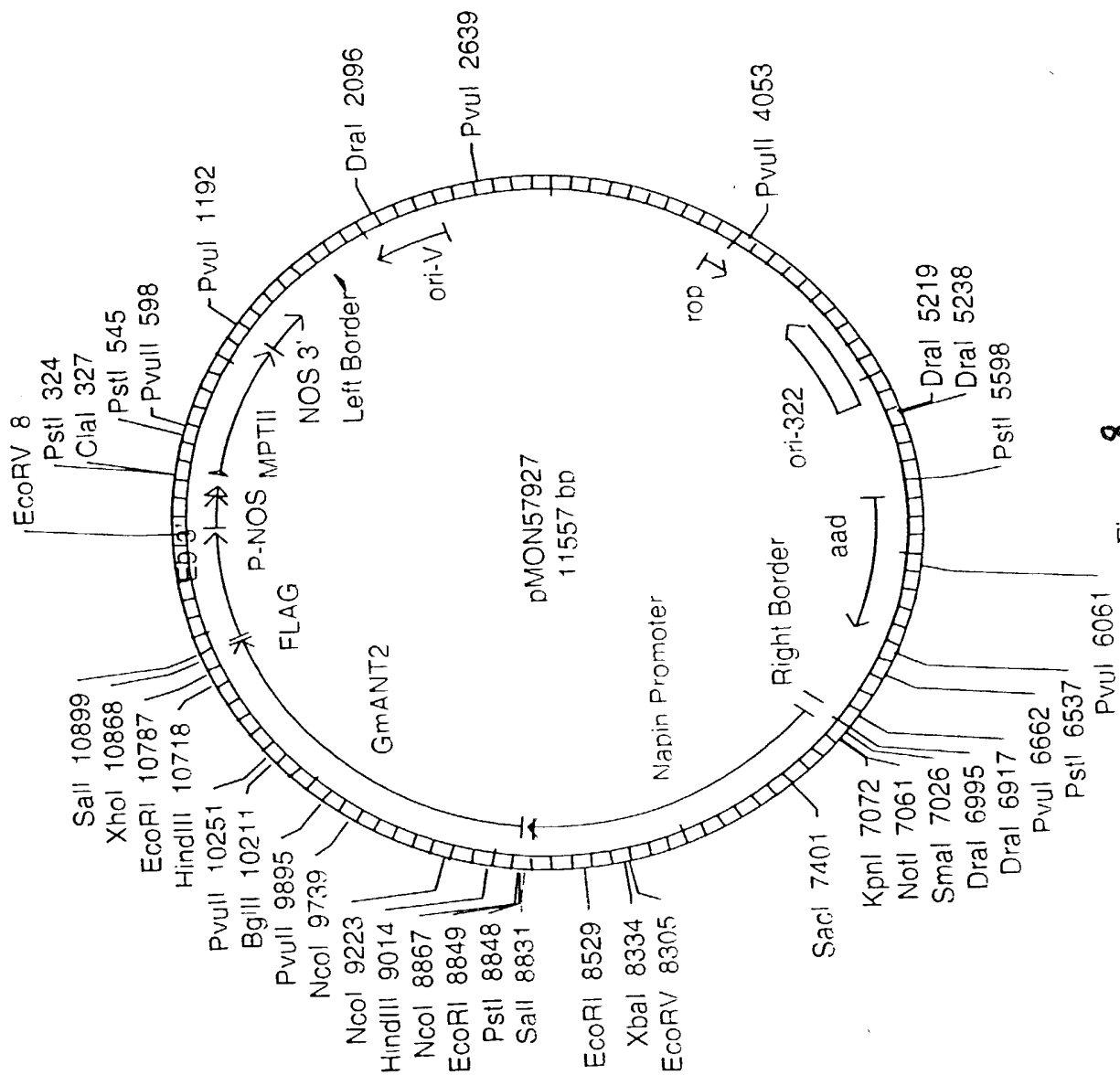
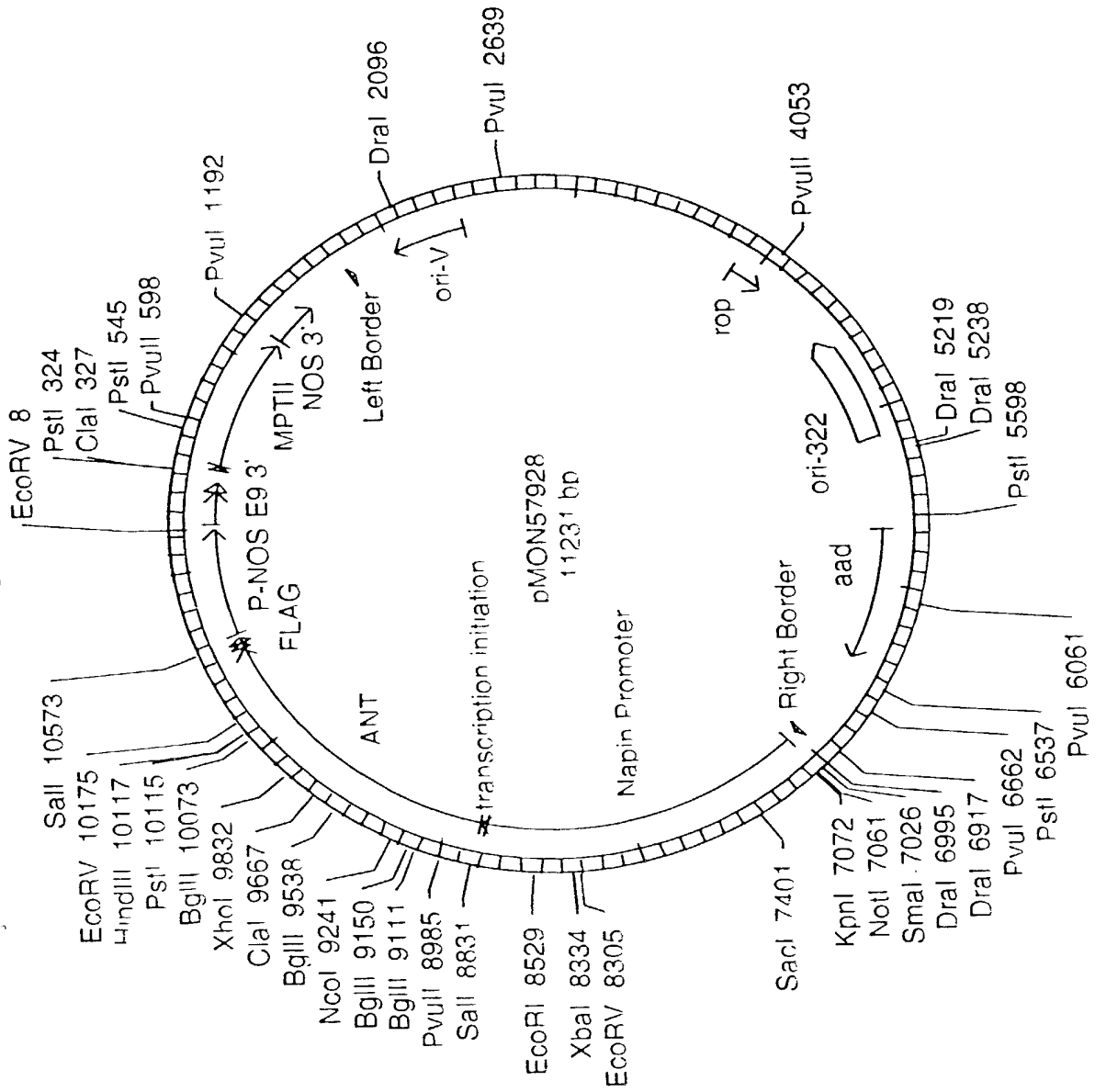


Figure 8



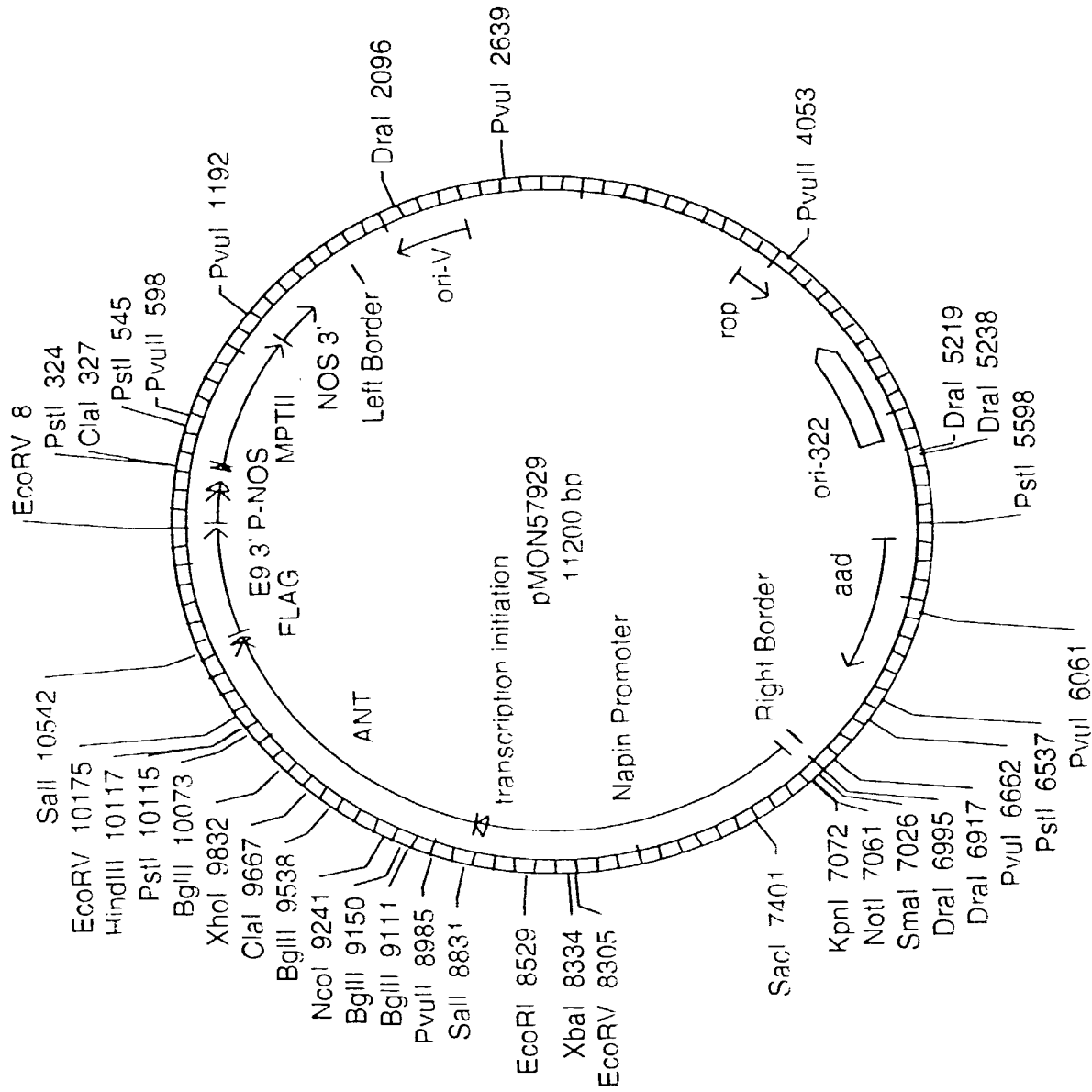


Figure 10

Figure 11

Figure 12

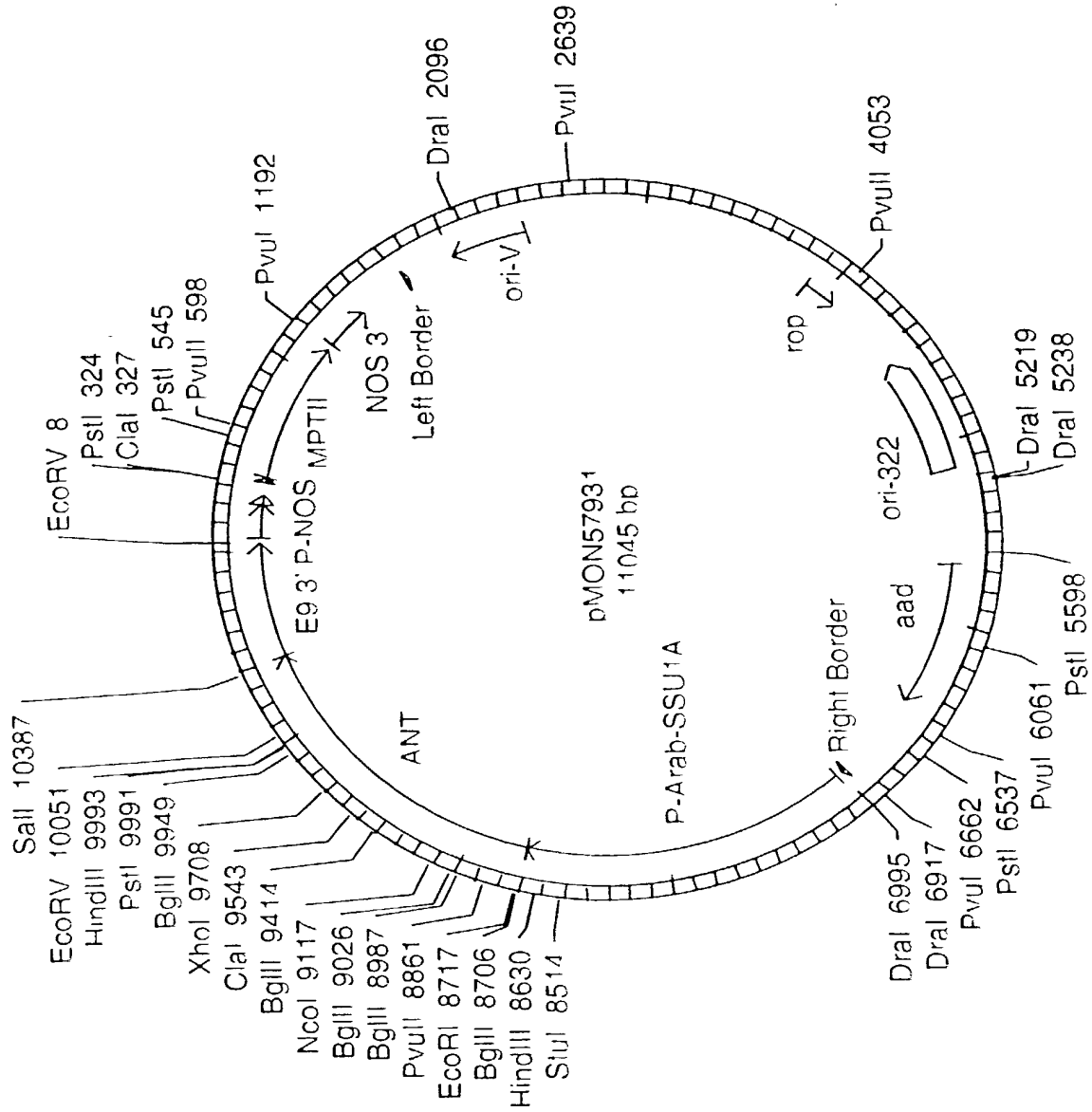


Figure 13

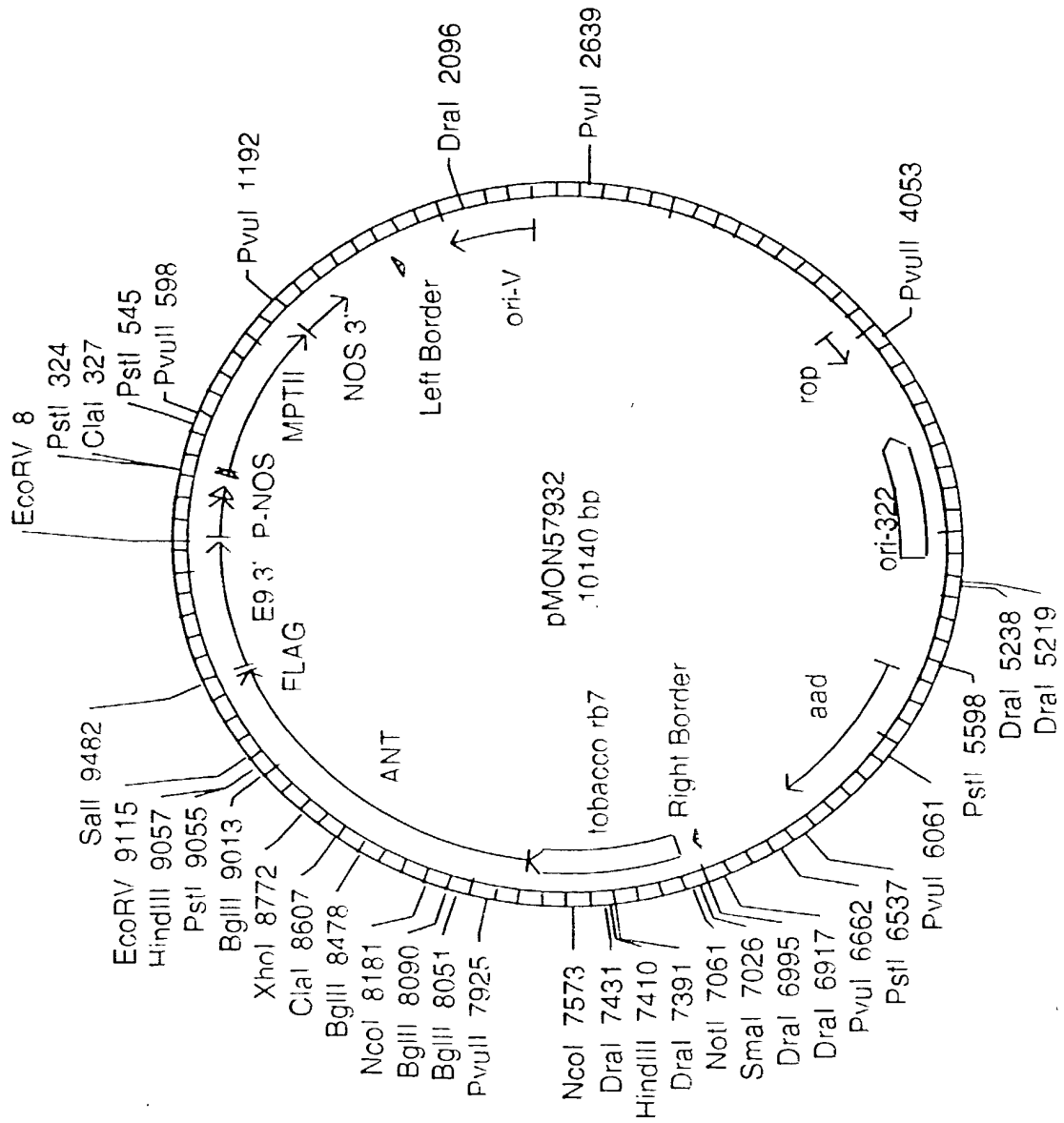


Figure 14

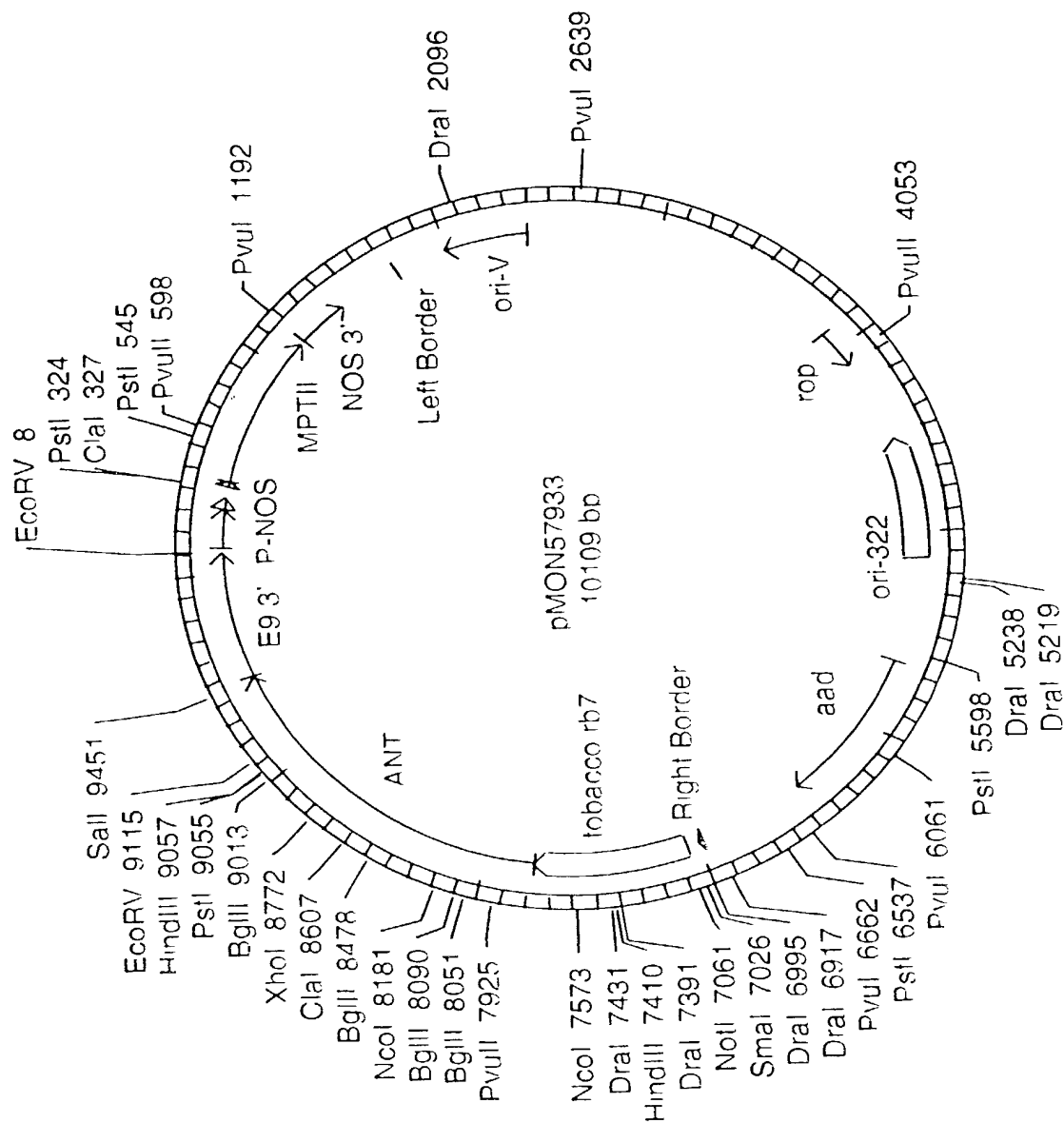
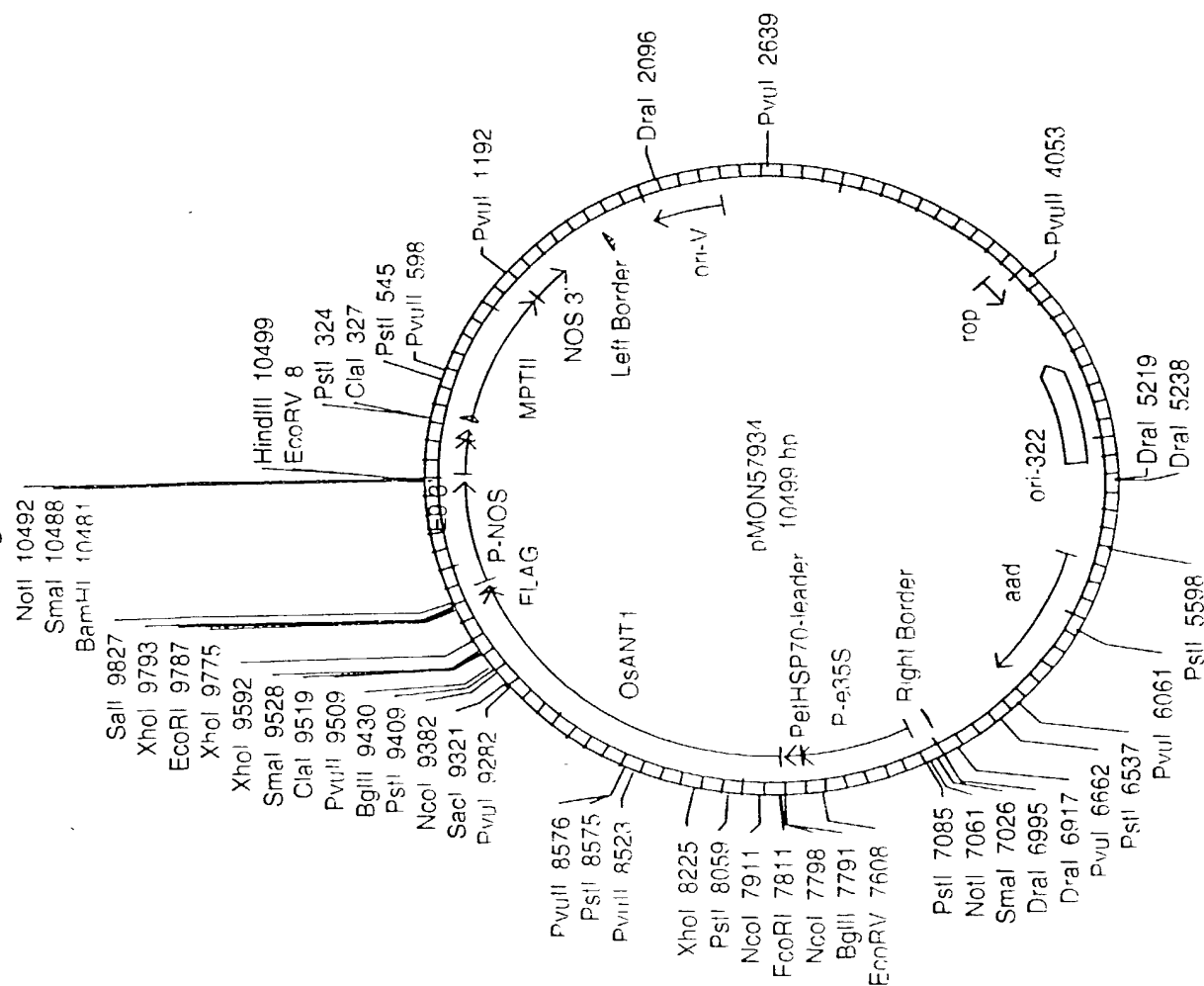


Figure 15



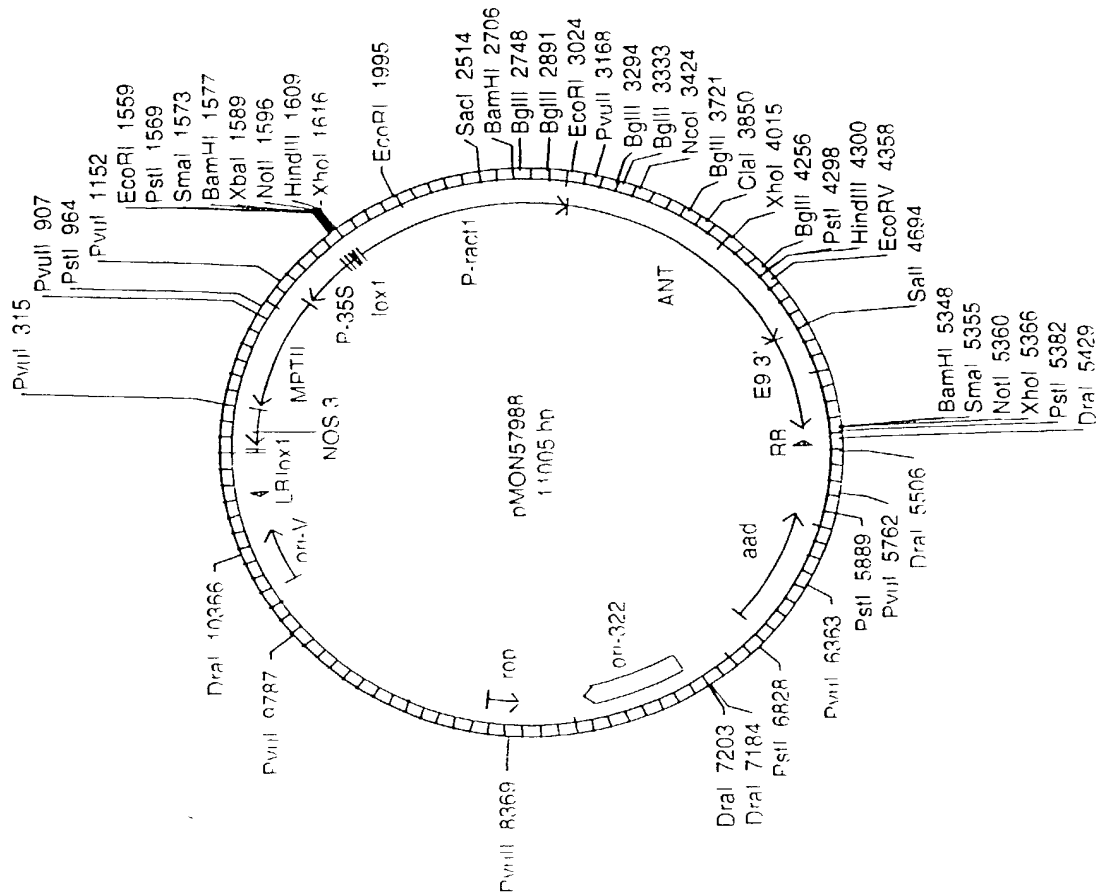
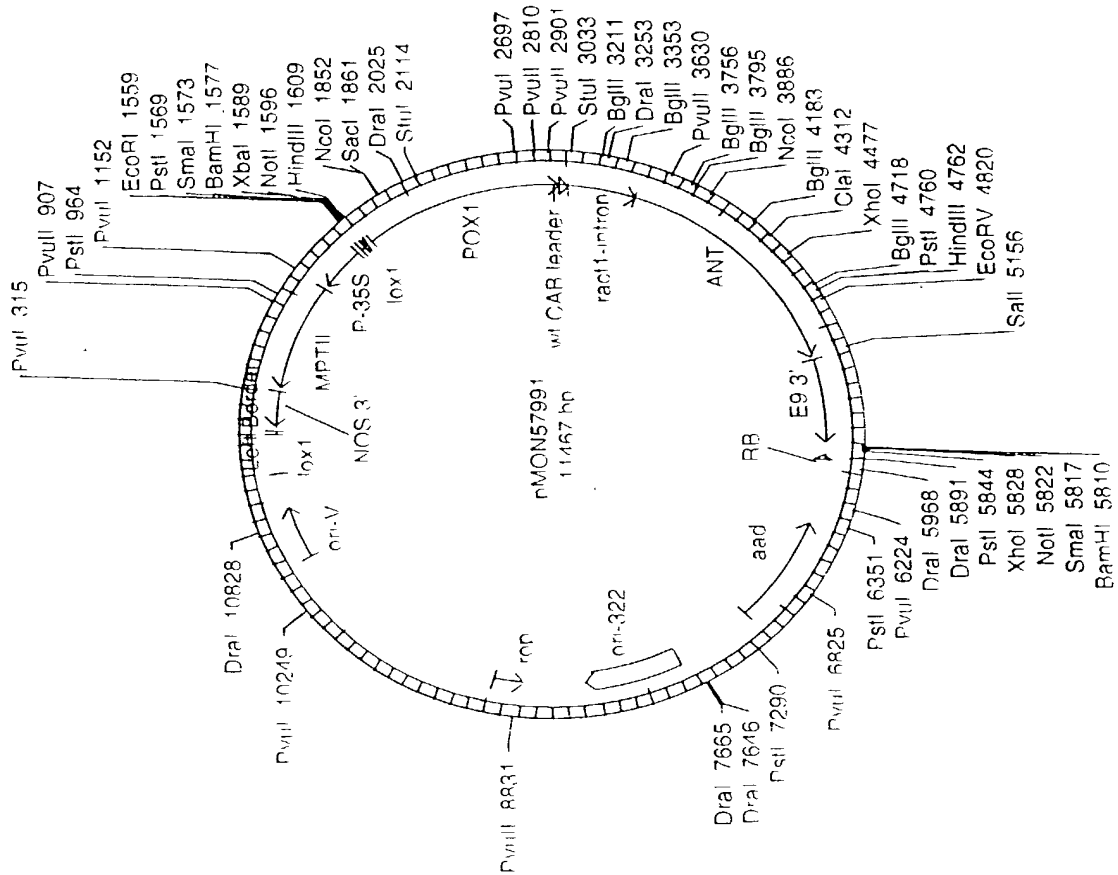


Figure 17



Country	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
Japan	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
Germany	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0
France	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0
Italy	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0
Spain	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0
Sweden	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0
United Kingdom	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0
United States	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
Canada	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0
China	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0
India	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
South Africa	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0
South Korea	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0
Poland	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0
Belgium	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0
Portugal	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0
Spain	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
Sweden	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0
United Kingdom	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0
United States	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0
Canada	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
China	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0
India	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0
South Africa	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0
South Korea	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0
Poland	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
Belgium	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0
Portugal	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0
Spain	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0
Sweden	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0
United Kingdom	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.

